



2022 Irrigated Forage Sorghum Variety Performance Trial at Rocky Ford

Variety	Brand	Yield										Forage Quality ^a														
		Dry		Yield	2-Year		Moisture	Brix	Plant Height	Forage Type ^c	Relative Maturity ^d	Traits ^e	WSC				NDFD				NEL	Milk/Ton	Beef/Ton			
		Forage ^b	Matter		Forage Avg.	Moisture							CP	aNDFom	Lignin	(Sugar)	Starch	Ash	Fat	30hr				240hr	TDN	
tons/ac	% of test avg.	tons/ac	% at harvest	percent	in	RFQ	CP	aNDFom	Lignin	(Sugar)	Starch	Ash	Fat	30hr	240hr	TDN	Mcal/cwt	lb/ton	lb/ton							
Fullgraze II	Dyna-Gro Seed	34.7	12.1	136%	34.3	67	12	153	SS	ML	-	72	5.7	65	6.3	7.5	4	6	2	46	63	63	64	2346	31	
Super Sile 20	Dyna-Gro Seed	34.2	12.0	134%	31.9	73	17	124	FS	ML	-	90	7.0	52	5.1	5.3	18	10	2	42	60	65	67	2482	50	
2-Way AT	Warner Seeds, Inc	30.8	10.8	120%	-	70	9	102	FS	ML	SCA	106	7.0	45	4.9	2.6	28	8	2	37	57	67	69	2839	72	
Danny Boy II BMR	Dyna-Gro Seed	30.5	10.7	119%	31.0	80	9	142	SS	ME	BMR	80	7.7	64	4.2	8.4	0	14	2	54	68	63	64	1899	26	
5FS Star	Dyna-Gro Seed	30.1	10.5	118%	30.4	68	12	112	FS	E	-	112	5.8	44	4.6	8.1	23	7	2	38	56	67	69	2978	98	
ADV F8322	Alta Seeds	29.6	10.4	116%	25.8	68	17	92	FS	M	SCA	98	6.4	49	4.6	4.5	24	11	2	42	60	66	68	2579	56	
F72FS05	Dyna-Gro Seed	29.3	10.3	115%	25.9	69	6	91	FS	ME	-	113	6.2	46	5.1	3.2	27	7	2	42	61	66	68	2955	106	
Super Sile 30	Dyna-Gro Seed	28.0	9.8	110%	29.5	71	15	136	FS	ME	-	90	7.1	59	4.7	10.0	5	9	2	51	66	64	66	2450	67	
F75FS13	Dyna-Gro Seed	27.1	9.5	106%	-	69	15	112	FS	M	-	126	6.5	43	4.5	8.4	24	6	3	40	58	67	69	3123	128	
ADV F8484IG	Alta Seeds	26.3	9.2	103%	-	73	15	87	FS	ML	IG, BD	90	7.7	53	4.9	4.6	17	11	2	45	63	65	67	2454	54	
Dynagraze II BMR	Dyna-Gro Seed	26.1	9.1	102%	25.4	69	11	113	SS	ME	BMR	108	6.8	50	5.5	5.9	21	6	2	45	62	66	68	2939	115	
Fullgraze II BMR	Dyna-Gro Seed	25.8	9.0	101%	27.6	72	16	143	SS	ML	BMR	92	6.8	65	5.3	11.9	2	9	2	56	69	64	65	2415	78	
SweetTon MS	Dyna-Gro Seed	25.6	9.0	100%	25.4	70	21	117	GS	ML	SCA	120	6.9	43	3.5	9.1	22	9	3	42	58	68	70	2916	98	
F74FS23 BMR	Dyna-Gro Seed	25.3	8.9	99%	19.1	71	16	99	FS	M	BMR, BD	131	6.1	44	2.7	5.7	26	13	2	51	63	68	70	2760	94	
Dynagraze II	Dyna-Gro Seed	24.3	8.5	95%	23.7	67	7	107	SS	ME	-	100	7.4	47	4.5	7.3	23	12	2	42	58	66	68	2529	45	
PEARL	Mojo Seed	23.2	8.1	91%	23.8	69	3	90	FS	M	SCA	107	6.3	47	3.6	6.0	25	13	2	44	60	67	69	2528	54	
W7706-W	Warner Seeds, Inc	21.6	7.6	85%	-	68	3	80	GS	ME	SCA	124	6.5	40	4.0	3.2	31	11	2	40	57	67	69	2854	75	
AF7102	Alta Seeds	21.2	7.4	83%	-	69	7	82	FS	ME	BMR	131	6.3	43	3.1	8.9	23	13	3	51	64	67	70	2785	102	
F72FS25 BMR	Dyna-Gro Seed	20.5	7.2	80%	20.0	74	14	74	FS	M	BMR	141	6.3	38	3.5	2.5	29	10	2	44	60	68	71	3122	120	
F71FS72 BMR	Dyna-Gro Seed	20.4	7.1	80%	19.1	71	4	84	FS	E	BMR	163	6.7	36	3.8	5.7	34	7	3	42	58	69	71	3378	155	
Super Sweet 10	Dyna-Gro Seed	20.2	7.1	79%	-	72	14	103	SS	M	-	112	8.5	46	5.5	6.2	19	7	2	41	59	65	67	2925	102	
F74FS72 BMR	Dyna-Gro Seed	19.6	6.9	77%	18.1	74	13	74	FS	M	BMR	120	8.1	46	3.3	3.7	24	13	2	49	63	67	69	2689	88	
OPAL	Mojo Seed	19.6	6.9	77%	19.8	71	10	86	FS	M	-	86	6.7	50	4.0	7.3	19	13	2	41	58	66	68	2272	14	
ADV F7232	Alta Seeds	19.5	6.8	76%	-	73	17	71	FS	M	SCA	123	8.8	45	3.1	4.4	18	14	2	53	67	66	68	2650	98	
Average		25.6	8.9	100%	25.3	71	12	103				110	6.9	48	4.3	6.3	20	10	2	45	61	66	68	2703	80	
[†] LSD (0.30)		2.1																								
[‡] LSD (0.05)		4.1																								

^aAll forage quality analyses results are dry basis values. CP=crude protein; aNDFom=ash free neutral detergent fiber; WSC=water-soluble carbohydrates; NDFD=neutral detergent fiber digestibility; TDN=total digestible nutrients; NEL=net energy for lactation; Milk/ton=predicted amount of milk produced per ton of silage dry matter calculated using MILK2013; Beef/ton=predicted amount of beef produced per ton of silage dry matter.

^bForage yield adjusted to 65% moisture content based on dried samples.

^cForage Type: GS=grain sorghum; FS=forage sorghum; SS=sorghum sudangrass.

^dRelative maturities are provided by the companies. E=early; ME=medium-early; M=medium; ML=medium-late; L=late.

^eTraits are provided by the companies. Dashes mean conventional (no traits) or information isn't available. BD=brachytic dwarf; BMR=brown mid-rib; IG=iGrowth herbicide technology; SCA=sugar cane aphid.

^fIf the difference between two variety yields equals or exceeds the LSD value, the difference is significant. Farmers selecting a variety based on yield should use the LSD (0.30) to protect from false negative decisions. Companies or researchers may be interested in the LSD (0.05) to avoid false positive conclusions.

Site Information

Collaborator: CSU Arkansas Valley Research Center (Kevin Tanabe and Lane Simmons)
 Planting Date: May 16, 2022
 Harvest Date: September 22, 2022
 Fertilizer: Pre-plant: N at 111, P at 14, and K at 1.5 lb/ac
 Herbicide: Huskie at 16 oz/ac and Starane at 6.4 oz/ac applied on June 20th
 Soil Type: Rocky Ford silty clay loam
 GPS Coordinates: 38.0389, -103.6933

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